

REMARKS

The present patent application has been reviewed in light of the office action, dated September 17, 2004, in which, claims 2- 19 are rejected under 35 USC Section 103 on Frazier Jr. (hereinafter "Frazier") or Kaufman et al. (hereinafter "Kaufman") in view of Short et al. (hereinafter "Short"). Reconsideration of this patent application in view of the foregoing amendment and following remarks is respectfully requested.

Claims 2-38 are pending. Claims 2, 3, 5, 7, 10, 11, 16, 19, 20, 25, 28, 29, 34, 37 have been amended. New claims 37 and 38 have been added. No claims have been cancelled.

The Examiner has rejected claims 2- 19 under 35 USC Section 103 on Frazier or Kaufman in view of Short. This rejection by the Examiner is respectfully traversed.

Kaufman, Fraizer and Short describe communication systems that have spreading code sequences that are time invariant. That is, a unique code is assigned to each node in a communication system and does not change.

In contrast, as amended, claim 2 recites subject matter regarding code sequences that may change over time. Examples include embodiments described in the present patent application. For example, at paragraph 92, the present patent application discusses an embodiment in which different spreading-code sequences are selected during different symbol intervals. Therefore, claim 2, as amended, and the rejected claims that depend from it, are believed to patentably distinguish from the cited patents. It is, therefore, respectfully requested that the Examiner withdraw his rejection as to these claims.

It is noted that claimed subject matter may be patentably distinguished from the cited patents for additional reasons; however, the foregoing is believed to be sufficient.

The remaining rejected claims patentably distinguish from the cited patents at least for similar reasons. It is, therefore, respectfully requested that the Examiner withdraw his rejection of these claims.

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CONCLUSION

In view of the foregoing, it is respectfully asserted that all of the claims pending in the present patent application are in condition for allowance. If the Examiner has any questions, he is invited to contact the undersigned at (503) 629-7477. Reconsideration of the present patent application and early allowance of all the claims is respectfully requested.

Respectfully submitted,

Dated:

2/17/05

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IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (previously canceled).

Claim 2 (amended): A method comprising:

employing a [unique] temporal spreading code sequence [of binary spreading codes for a block of bits] for spreading at least one bit of information;

said [unique] temporal sequence being [generated at least in part by a sequence randomizer and being] selected from a set of sequences.

Claim 3 (amended): The method of claim 2, wherein said spreading is carried out [unique sequence is employed] by a receiver.

Claim 4 (previously added): The method of claim 3, wherein said receiver is part of a

Claim 11 (amended): An apparatus comprising: a unit; said unit being adapted to employ a [unique] temporal code spreading sequence for spreading at least one bit of information [of binary spreading codes for a block of bits]; said [unique] temporal sequence being [generated at least in part by a sequence randomizer and being] selected from a set of sequences.

Claim 12 (previously added): The apparatus of claim 11, wherein said unit is included in a receiver.

Claim 13 (previously added): The apparatus of claim 12, wherein said receiver is part of a communication network.

Claim 14 (previously added): The apparatus of claim 11, wherein said unit is included in a transmitter.

Claim 15 (previously added): The apparatus of claim 14, wherein said transmitter is part of a communication network.

Claim 16 (amended): The apparatus of claim 11, wherein [said block of] a collection of bits of information including said at least one bit of information corresponds to a symbol.

Claim 17 (previously amended): The apparatus of claim 16, wherein said unit is adapted to represent said symbol using quadrature modulation.

Claim 18 (previously amended): The apparatus of claim 17, wherein said quadrature modulation comprises phase-shift keyed modulation.

Claim 19 (amended): The apparatus of claim 11, wherein said [unique] temporal sequence comprises a composite sequence.

Claim 20 (amended): An apparatus comprising: a first unit and a second unit; at least one of said units comprising means to generate a [unique] temporal sequence of binary spreading codes[for a block of bits].

Claim 21 (previously added): The apparatus of claim 20, wherein said units are included in a receiver.

Claim 22 (previously added): The apparatus of claim 21, wherein said receiver is part of a communication network.

Claim 23 (previously added): The apparatus of claim 20, wherein said units are included in a transmitter.

Claim 24 (previously added): The apparatus of claim 23, wherein said transmitter is part of a communication network.

Claim 25 (amended): The apparatus of claim 20, wherein a collection of bits [said block of bits] corresponds to a symbol.

Claim 26 (previously amended): The apparatus of claim 25, wherein at least one of said units comprises means to represent said symbol using quadrature modulation.

Claim 27 (previously amended): The apparatus of claim 26, wherein said quadrature modulation comprises phase-shift keyed modulation.

Claim 28 (amended): The apparatus of claim 20, wherein said [unique] temporal sequence comprises a composite sequence.

Claim 29 (amended): A set of signals comprising: communication signals having been generated by a method comprising:

employing a [unique] temporal spreading code sequence [of binary spreading codes for a block of bits];

said [unique] temporal sequence being [generated at least in part by a sequence randomizer and being]selected from a set of sequences.

Claim 30 (previously added): The set of signals of claim 29, wherein said communication signals are received by a receiver.

Claim 31 (previously added): The set of signals of claim 30, wherein said receiver is part of a communication network.

Claim 32 (previously added): The set of signals of claim 29, wherein said communication signals are transmitted by a transmitter.

Claim 33 (previously added): The set of signals of claim 32, wherein said transmitter is part of a communication network.

Claim 34 (amended): The set of signals of claim 29, wherein [the block of] a collection of bits corresponds to a symbol.

Claim 35 (previously amended): The set of signals of claim 34, wherein said symbol is represented using quadrature modulation.

Claim 36 (previously amended): The set of signals of claim 35, wherein said quadrature modulation comprises phase-shift keyed modulation.

Claim 37 (amended): The set of signals of claim 29, wherein said [unique] temporal sequence comprises a composite sequence.

Claim 38 (new): The method of claim 2, wherein different spreading code temporal sequences are used for multiple simultaneous transmissions employing the same carrier frequency.

Claim 39 (new): The method of claim 2, wherein said temporal sequence comprises a unique sequence.